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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,380	12/01/2000	Toshiaki Okuno	50212-168	1261
20277	7590	02/07/2005	EXAMINER	
MCDERMOTT WILL & EMERY LLP			PHAN, HANH	
600 13TH STREET, N.W.			ART UNIT	
WASHINGTON, DC 20005-3096			PAPER NUMBER	
			2633	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/726,380

Applicant(s)

OKUNO

Examiner

Hanh Phan

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 3 is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This Office Action is responsive to the RCE filed on 10/26/2004.
2. The indicated allowability of claim 6 is withdrawn in view of the newly 112 rejection and 101 rejection.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 5 and 6, claims 5 and 6 claim both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. See *In Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990) and see MPEP 2173.05(p) section II.

***Claim Rejections - 35 USC § 101***

5. Claims 5 and 6 are rejected under 35 U.S.C. 101 based on the theory that the claim is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Id.* At 1551.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones et al (US Patent No. 6,229,935).

Regarding claims 1 and 5, referring to Figures 2 and 5, Jones discloses an optical communication system (i.e., a wavelength division multiplex system, Figure 2, col. 2, lines 56-67) comprising an optical transmission line (i.e., optical fiber transmission line 12, Fig. 2) disposed between a transmitting end (i.e., optical transmitter 10, Fig. 2) and a receiving end (inherently, there is a receiving end in the wavelength division multiplex system of Jones) for transmitting signals of plural channels, and one or more nodes (i.e., a branching unit 18, receiver 24 and transmitter 26 of Figs. 2 and 5 in the form of a wavelength add/drop multiplexer ADM) each arranged at a predetermined position of the optical transmission line (Fig. 2) and adding signals of a predetermined channel to the optical transmission line, each of said nodes including a transmitter for outputting the signals and a structure for introducing the signals to said transmission line (as indicated in Fig. 2, the branching unit 18 is

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arranged to route a signal carried by a specific wavelength, for example shortest wavelength  $\lambda_s$  or longest wavelength  $\lambda_L$ , from the trunk onto a drop fiber 20 for onward transmission by a receiver 24, Fig. 5, at the end of the branch and to introduce to the trunk a signal carried by the same wavelength, for example shortest wavelength  $\lambda_s$  or longest wavelength  $\lambda_L$ , from a transmitter 26, Fig. 5, at the end of the branch which signal wavelength is provided on the add fiber),

wherein among signal channels (i.e., shortest wavelength  $\lambda_s$  and longest wavelength  $\lambda_L$ ) which can be added to the optical transmission line (Figs. 2 and 5), each of said nodes (i.e., a branching unit 18, receiver 24 and transmitter 26, Figs. 2 and 5) adds signals of a signal channel (i.e., shortest wavelength  $\lambda_s$  or longest wavelength  $\lambda_L$ ) at which an absolute value of previously calculated accumulated-dispersion from said node itself to the receiving end becomes smallest, to the optical transmission line (see col. 3, lines 4-8 and 10-14 and col. 5, lines 22-24),

wherein each of said nodes (Fig. 5) has no additional chromatic dispersion compensator in an optical path (22) from the transmitter (26) thereof to the optical transmission line (12)(see col. 5, lines 22-24).

Regarding claim 4, Jones further teaches a dispersion compensator (16)(Fig. 2) arranged at a predetermined position of the optical transmission line (col. 6, lines 9-11).

### ***Allowable Subject Matter***

8. Claims 2 and 3 are allowed.

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9. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 2, the prior art of record fails to teach an optical communication system recited in claim 1 wherein each of said nodes includes a node control system which specifies signal channels which can be added to the optical transmission line, and among said specified signal channels, assigns a signal channel at which the absolute value of accumulated-dispersion from said associated node to said receiving end becomes smallest, to said associated node.

With respect to claim 3, the prior art of record fails to teach an optical communication system recited in claim 1 wherein further comprising a centralized control system which calculates wavelength dependency of accumulated-dispersion up to said receiving end for each of said nodes, and assigns optimum signal channels to said nodes in descending order of the absolute value of the accumulated-dispersion, wherein said centralized control system specifies signal channels which can be added to said optical transmission line for every node selected as an assignment object, and among said specified signal channels, assigns a signal channel at which the absolute of the accumulated-dispersion from said selected node itself to said receiving end becomes smallest, to said selected node.

### ***Response to Arguments***

10. Applicant's arguments filed 10/26/2004 have been fully considered but they are not persuasive.

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The applicant's arguments to claims 1, 4 and 5 are not persuasive. The independent claims 1 and 5 are now amended to include the limitation of **"wherein each of said nodes has no additional chromatic dispersion compensator in an optical path from the transmitter thereof to the optical transmission line"** and the applicant argues that the cited reference (Jones et al) fails to teach such limitation. The examiner respectfully disagrees. Referring to Figure 5, Jones et al teaches wherein each of said nodes has no additional chromatic dispersion compensator in an optical path (22) from the transmitter (26) thereof to the optical transmission line (12)( see col. 5, lines 22-24).

Therefore, it is believed that the limitations of claims 1, 4 and 5 are still met by Jones et al and the rejection is still maintained.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.



HANH PHAN  
PRIMARY EXAMINER